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PATENT APPLICATION

ATTORNEY DOCKET NO.

10011529-1

IN THE

UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):

Tom Howard et al.

Confirmation No.: 6181

Application No.: 10/037,267

Examiner: T.M. Szymanski

Filing Date:

January 2, 2002

Group Art Unit: 2134

Title: SYSTEM AND METHOD FOR PREVENTING USE OF A WIRELESS DEVICE

Mail Stop Appeal Brief - Patents **Commissioner For Patents** PO Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

06/22/2006 Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

No fee is required for filing of this Reply Brief.

If any fees are required please charge Deposit Account 08-2025.

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Date of Deposit: August 3, 2006

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Respectfully submitted,

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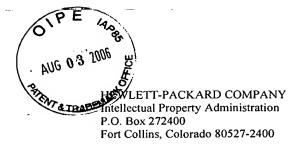
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Docket No.: 10011529-1

(PATENT)

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In re Patent Application of:

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For: SYSTEM AND METHOD FOR PREVENTING

USE OF A WIRELESS DEVICE

Examiner: T. M. Szymanski

REPLY BRIEF

MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.41(a), this Reply Brief is filed within two months of the Examiner's Answer. It is believed that no fees are due.

This brief contains items under the following headings per M.P.E.P. § 1208:

- I. Status of Claims
- II. Grounds of Rejection to be Reviewed on Appeal
- III. Argument

I. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 17 claims pending in application.

- B. Current Status of Claims
 - 1. Claims canceled: 8, 10 and 20.
 - 2. <u>Claims withdrawn from consideration but not canceled</u>: None.
 - 3. <u>Claims pending</u>: 1-7, 9, and 11-19
 - 4. <u>Claims allowed</u>: None
 - 5. <u>Claims rejected</u>: 1-7, 9, and 11-19
- C. Claims On Appeal

The claims on appeal are claims 1-7, 9, and 11-19.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-7, 9, and 11-19 are rejected under 35 U.S.C. §103(a) as being obvious over US 5,987,609 (hereinafter, *Hasebe*), in view of US Publication 2002/0004905 (hereinafter, *Davis*) in further view of US Publication 2001/0045884 (hereinafter, *Barrus*). This is the sole ground of rejection.

III. ARGUMENT

Claims 1-7, 9, and 11-19 are rejected under 35 U.S.C. §103(a) as being obvious over *Hasebe* in view of *Davis* in further view of *Barrus*. Appellant traverses the rejection.

Since 37 C.F.R. §41.41 does not specify a format for Reply Briefs, Appellant presents the arguments below in a format organized to counter the Response to Arguments section of the Examiner's Answer rather than to conform to the format for an Appeal Brief, wherein independently argued claims are presented under separate headings. The format of this Reply does not cause claims to be considered together or separately other than as presented in the Appeal Brief. It is believed that this eliminates repetition and is done for the convenience of the Board.

To show obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the applied reference. See In re Vaeck 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck and Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Without conceding the second criterion, Appellant respectfully asserts that the rejection does not satisfy the first and third criteria. Specifically Appellant argues that the combination of Hasebe, Davis, and Barrus is improper because of a lack of motivation and, further, that the combination does not teach or suggest features recited in the claims.

After reviewing the Examiner's Answer, it is clear that the combination is based upon a misunderstanding of the operation of the *Davis* system. *Davis* teaches a system for BIOS authentication. *Davis* describes a security breach wherein a computer is the object of a theft. See *Davis* at [0004]. The thief bypasses password-based security mechanisms by replacing a memory device containing the computer's BIOS code with another memory device that has different BIOS code therein. Id. at [0007]. *Davis* also teaches that some viruses may infiltrate BIOS code. Id. at [0008]. The *Davis* system addresses these particular threats by proposing a system that uses a "cryptographic device" to prevent a host processor from

performing a boot-up procedure until the cryptographic device authenticates the BIOS code. See id. at, e.g., Abstract. Thus, *Davis* teaches a security device that authenticates BIOS code.

By contrast, the Examiner's proposed combination includes the security process of *Hasebe* "in the BIOS level implementation of the *Davis* system." See Examiner's Answer at 7. The Examiner further states that "the BIOS is operable to boot the device, verify the integrity (*Davis* paragraph 23) of said security protocol process before completing boot operations." See id. In other words, the rejection attempts to create a system wherein a BIOS verifies the integrity of a security protocol process; however, not one of the cited references teaches or suggests a technique wherein a BIOS verifies a process, much less a security protocol process. Thus, the rejection must fail as to any claims that recite a BIOS that verifies a security protocol process because of failure to teach or suggest all claim limitations. Moreover, after the Examiner's latest clarification of the rejection, it is believed that the rejections of all claims must fail because of a lack of motivation to combine the references as proposed.

A. Lack of Motivation to Combine the References

It is well settled that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combinations, *In re Mills*, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). In this case, the cited art teaches against the proposed combination. As noted above, the Examiner proposes to modify the system of *Hasebe* to include a BIOS that verifies the integrity of the *Hasebe* security process, wherein the Examiner asserts that *Davis* teaches or suggests a BIOS that performs a verification. See Examiner's Answer at 3 and 7. (It should be noted that Appellant strenuously disagrees with the proposition that the BIOS of *Davis* performs an integrity check.) *Davis* and *Hasebe* cannot be combined in this manner because *Davis* teaches against adapting its BIOS in the manner asserted by the rejection. Specifically, to adapt the BIOS of *Davis* to verify the integrity of a security protocol process leaves the resultant system open to viruses and the BIOS-swapping security circumvention that *Davis* was deliberately designed to prevent. See, e.g., *Davis* at [0004]-[0008]. Accordingly, one of ordinary skill in the art would not look to *Davis* to modify *Hasebe* in the manner proposed by the Examiner, and the proposed combination lacks the requisite desirability. Therefore,

5

Appellant respectfully requests reversal of the 35 U.S.C. § 103(a) rejection of claims 1-7, 9, and 11-19.

Additionally, there is a lack of motivation to combine *Barrus* with the *Hasebe/Davis* combination. Recognition of a problem does not render obvious the eventual solution. *See Cardiac Pacemakers Inc. v. St. Jude Medical Inc.*, 72 U.S.P.Q.2d 1333, 1337 (Fed. Cir. 2004). Similarly, there is a difference between general motivation to solve a problem and the motivation to create a particular solution. *See id.* ("There is an important distinction between the general motivation to cure an uncured disease...and the motivation to create a particular cure.") In this case, the Examiner proposes to include flash memory from *Barrus* in the combination produced from *Hasebe* and *Davis*. The Examiner states:

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the system of *Barrus* et al with that of the *Hasebe/Davis* combination. The combination of these two systems forms a better system with improved security measures and thus greater data integrity.

See Examiner's Answer at 4. The Examiner suggests modifying *Hasebe* and *Davis* with *Barrus*, which the Examiner alleges include the "a better system with improved security measures and thus greater data integrity." In other words, the Examiner points to a general motivation to combine *Hasebe* and *Davis* with *Barrus* (it would be "better" and "improved") but does not show that the cited art suggests why one would desire to modify *Hasebe* and *Davis* to include the flash memory that the Examiner asserts is provided by *Barrus*. Merely saying a combination is better and improved is not enough to explain why of ordinary skill in the art would desire to make the combination. The Examiner's new comment at page 8 of the Answer that RAM does not retain information with a loss of power does not supply the requisite motivation for two reasons. First, it merely states a problem with RAM without explaining the benefit of non-volatile memory. Second, it is not based on objective evidence of the record (Official Notice or teachings of the cited art), contrary to Federal Circuit case law. *See In re Lee*, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002). Thus, the motivation provided by the Examiner to modify *Hasebe* and *Davis* with features from *Barrus* must fail. Therefore, the reversal of the rejection of claims 1-7, 9, and 11-19.

B. Failure to Teach or Suggest All Claim Limitations

Regarding claim 1 and its dependent claims, claim 1 recites, in part, "a basic input/output system (BIOS) that is operable to boot said processor-based device and is further operable to verify integrity of said security protocol process before completing boot operations." It the Appeal Brief, it was shown that the combination cannot teach or suggest this feature because not one of the references teaches or suggests a BIOS operable as claimed. Specifically, it was noted that *Davis* (which the Examiner relies upon to teach this feature) does not teach or suggest a BIOS operable to verify an integrity of a security protocol process because *Davis* teaches a different relationship between a BIOS and a security process—a BIOS that, itself, is authenticated by a security device. Appellant also showed that the BIOS and the security process of *Davis* cannot be considered to be one in the same, contrary to an assertion of the Final Office Action.

The Examiner's Answer puts forth two arguments. First, the Examiner restates the combination used in the rejection by stating:

Thus when the security protocol of *Hasebe* is included within the BIOS level implementation of the *Davis* system a BIOS (*Davis* Fig 5) as indicated within claim 1 wherein the BIOS is operable to boot the device, verify the integrity (*Davis* paragraph 23) of said security protocol process before completing boot operations is provided.

See Examiner's Answer at 7. However, this merely clarifies that the rejection is based upon a belief that the BIOS of *Davis* performs a verification of a security protocol process. As noted above, this is simply incorrect.

Second, the Examiner attempts to patch logical gaps in the rejection by buttressing an argument that the cryptographic device and the BIOS (both of *Davis*) can be considered one in the same. See id. This is incorrect because the system of *Davis* is designed to prevent a BIOS-swapping security circumvention, and thus, *Davis* requires that the cryptographic device and the BIOS are separate. See *Davis* at [0007] and Abstract. Further, the Examiner's argument that the cryptographic device and the BIOS can be construed as the same entity because the "two are operatively connected" and "part of the same system" in *Davis* stretches too far. To say that any two portions of a processing device can be construed to be one in the same as long as they are "operatively connected" and "part of the same system" would result in a reading wherein all portions of a processing device are considered to be the same. Such

position is simply unsupportable. Thus, Appellant respectfully requests that the 35 U.S.C. §103(a) rejection of claim 1 and its dependent claims be reversed.

Regarding claims 2 and 9 (and the claims that depend from claim 9), Appellant acknowledges the Examiner's arguments on pages 7 and 9 of the Answer, but notes that even if the allegations about the teaching of *Barrus* is true, *arguendo*, there is still a lack of motivation provided thus far for combining *Barrus* with the other references. Therefore, Appellant respectfully requests that the 35 U.S.C. §103(a) rejection of claims 1-7, 9, and 11-19 be reversed.

Regarding claims 6, 13, and 19, the Examiner changes the rejection to cite the owner indication feature of *Hasebe* to teach or suggest, "a display, wherein said security protocol process causes said display to present information indicating that said rightful user is not in possession of said processor-based device," as recited by claim 6, and "displaying a message on a display of said processor-based device to indicate that said processor-based device is not in possession of said rightful user," as recited by claim 13, and "means for displaying information to indicate that said rightful user is not in possession of said system," as recited by claim 19. See Examiner's Answer at 8 and 9 and Hasebe at e.g., Col. 6, lines 44-51. However, Hasebe merely teaches that the owner indication feature displays the identity of the device owner and the telephone number of the device owner. See Hasebe at Col. 6, lines 49-51. Indicating an owner name and telephone number indicates just that—an owner name and telephone number. It is not enough, without more, to teach or suggest presenting "information indicating that said rightful user is not in possession." Thus, the cited combination does not teach or suggest the above-recited features of claims 6, 13, and 19. Since the cited combination does not teach or suggest this feature of claims 6, 13, and 19, reversal of the 35 U.S.C. § 103(a) rejection of claims 6, 13, and 19 is respectfully requested.

Claim 7 recites, in part, "said security protocol process is implemented in an operating system of the processor-based device." Claim 16 recites, in part, "wherein said means for preventing execution is implemented by an operating system of said system." As explained in the Appeal brief, the combination of *Hasebe*, *Davis*, and *Barrus* does not teach or suggest at least these features. Specifically, it was shown that figure 3 of *Hasebe* merely teaches that a security program is stored in Read Only Memory (ROM), which is not enough to teach the

above-recited features because *Hasebe* does not mention or teach that the security program (or any other module in the cited ROM) is implemented in or by an operating system.

In response, the Examiner changes the rejection to cite the BIOS of *Davis* as an operating system. The Examiner states, "the security program is operative to run once the system has been authenticated as described by *Davis*, thus being implemented in the BIOS to prevent unauthorized use (*Hasebe* Col 2 lines 26-36 Fig 10)." However, as noted above, *Davis* teaches that a cryptographic device authenticates the BIOS and does not teach or suggest a security process implemented in or by the BIOS. Accordingly, the Examiner's change to the rejection does not cure the deficiency, even in light of the expansive reading of "operating system."

Further, it was also shown that an application that provides security functionality and runs on top of an operating system and/or is reliant upon such operating system is different than implementing such functionality in or by the operating system itself and that no teaching (either express or inherent) is provided in *Hasebe* that its software is implemented in or by an operating system of the system that is being protected. In response, the Examiner asserts that implemented in or by an operating system is not distinguishable from running on top of an operating system. See Examiner's Answer at 9. Specifically, the Examiner asserts that Appellant has not articulated a difference. See id. However, the Examiner fails to give proper weight to the claim language disregarding the prepositions "in" and "by" as they are used in claims 7 and 16. When proper weight is given to the claim language, it is clear that the cited combination of references does not teach or suggest these features of claims 7 and 16. Reversal of the 35 U.S.C. § 103(a) rejection of claims 7 and 16-19 is respectfully requested.

In light of the above, it is believed that all pending claims are allowable. Appellant respectfully requests reversal of the 35 U.S.C. §103(a) rejection thereof.

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Date of Deposit: August 3, 2006

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Respectfully submitted,

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